



## Drinking Water Standards and Health Advisories

WATER QUALITY, SECONDARY STANDARDS												
COMPONENT	Standard	EPA		IRIS		Acute	Health Advisories		Wt. of Evid.	California Action Level	Arizona MCL	Hawaii MCL
		SMCL	ug/kg-d	RfD	10 <sup>-6</sup> Risk		Non-Cancer	Cancer				
Color	Secondary	15 color units							*			
Corrosivity	Secondary	Non-corrosive							*			
Foaming Agents	Secondary	500 ug/L							*			
Odor	Secondary	3.0 OT#							*			
Total Dissolved Solids (TDS)	Secondary	500 mg/L							*			
pH	Secondary	6.5-8.5							*			

\* - Secondary standards are not federally enforceable, but may be enforced in California

# - Odor threshold number



## Drinking Water Standards and Health Advisories

## MICROBIALS AND INDICATORS

Contaminant	Standard	EPA		IRIS		Acute	Health Advisories		Wt. of Evid.	California		Arizona	Hawaii
		MCL	MCLG	RfD	ug/kg-d		10 <sup>-6</sup> Risk	10 days		Non-Cancer	Cancer		
<i>Cryptosporidium</i>	Current	TT a	0										
<i>Giardia lamblia</i>	Current	TT b	0										
Heterotrophic Plate Count	Current	TT c											
<i>Legionella</i>	Current	TT c	0										
Total Coliform Bacteria	Current	P/A	0										
Turbidity	Current	0.3/1NTU*											
Viruses	Current	TT d	0										

TT a- Two-log reduction by filtration treatment technique applies to surface water systems serving >10,000 people

TT b- Three-log filtration/inactivation treatment technique applies to all surface water systems

TT c- Applies to surface water systems only

TT d- Four-log inactivation treatment technique applies to all surface water systems

P/A- MCL is presence/absence of total or fecal coliform bacteria

\* 0.3 NTU, conv. or direct filtration; 1 NTU, diatomaceous earth or slow sand filtration. Applies only to systems required to filter



U.S. EPA Region 9, Drinking Water Division

**Drinking Water Standards and Health Advisories**

Chemicals	Standard	EPA		IRIS		Health Advisories			Wt. of Evid.	California*		Arizona*	Hawaii*
		MCL	MCLG	RfD	ug/kg-d	10 <sup>-6</sup> Risk	Acute 10 day	Chronic (lifetime)		MCL	PHG	MCL	MCL
Trichlorofluoromethane (Freon 11)				300			7,000	2000		150	700		
2,4,6-Trichlorophenol				0.3	3	30			3	B2			
2,4,5-Trichlorophenoxyacetic acid (2,4,5-T)				10			800	70		D			
2,4,5-Trichlorophenoxypropionic acid (2,4,5-TP) (Silvex)	Current	50	50	7.5			200	50		D	50	25	50
1,2,3-Trichloropropane				6			600	40					0.8
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)											1200	4000	
Trifluralin				7.5	5	80	5	5	C				
Trihalomethanes (TTHM)	Current	80								B2			
Trinitroglycerol							5	5	0.2				
Trinitrotoluene				0.5	1	20	2	1	C				
Trithion													
Vinyl Chloride	Current	2	0		0.02	3,000			0.015	A	0.5	0.05	2
Xylenes (sum of isomers)	Current Proposed Secondary	10,000 20	10,000	2000		40,000	10,000		D	1750	1800	10,000	10,000

Values are indicated in micrograms per liter (ug/l) [equivalent to parts per billion (ppb)] unless otherwise stated

Oral Referenced Doses (RfD) are in micrograms per kilogram per day (ug/kg-d), 10<sup>-6</sup> lifetime risk levels are in micrograms per liter.

\*- EPA MCLs apply unless noted as different

TTHM- Total Trihalomethanes. MCL is sum of bromoform, chloroform, bromodichloromethane, and dibromochloromethane



U.S. EPA Region 9, Drinking Water Division

**Drinking Water Standards and Health Advisories**

ORGANIC Chemicals			IRIS				Health Advisories			Wt. of Evid.	California*		Arizona*	Hawaii*			
	Standard	EPA		RfD	ug/kg-d	10 <sup>-6</sup> Risk	Acute 10 day	Chronic (lifetime)									
		MCL	MCLG					Non-Cancer	Cancer								
1,1,2,2-Tetrachloro-ethane				0.05	0.2	40	0.3	0.2		C	1	0.1					
Tetrachloroethylene (Perchloroethylene)	Current	5	0	10	0.7	2,000	10				5	0.06	5	5			
2,3,7,8-Tetrachloro-dibenzo-p-dioxin (Dioxin)	Current	3 E-5	0	1 E-6	2 E-7	1 E-4		2 E-7	B2	3 E-5			3 E-5	3 E-5			
Thiobencarb (Bolero)				20							70	70					
Toluene	Current Proposed Secondary	1000 40	1,000	200		2,000	1,000			D	150	150	1000	1000			
Toxaphene	Current	3	0	0.4	0.03	4		0.03	B2	3	0.03	3	3				
Tribromomethane (Bromoform, TTHM)	Current	80		20	4	2,000		4	B2	100		100	100				
Trichloroacetaldehyde (Chloral hydrate)				100					C								
Trichloroacetic acid (HAA5)	Current	60	300	100		4,000	300		C								
1,2,4-Trichlorobenzene	Current	70	70	1		100	10		D	70	5	70	70				
1,3,5-Trichlorobenzene				6		600	40		D								
1,1,1-Trichloroethane	Current	200	200	35		40,000	200		D	200		200	200				
1,1,2-Trichloroethane	Current	5	3	4	0.6	400	3	0.6	C	5		5	5				
Trichloroethylene	Current	5	0	7	2			2	B2	5	0.8	5	5				

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\*- EPA MCLs apply unless noted as different

TTHM- Total Trihalomethanes. MCL is sum of bromoform, chloroform, bromodichloromethane, and dibromochloromethane

HAA5- Haloacetic acids. MCL is sum of mono-, di- and tri-chloro-acetic acids, and mono- and di-bromo-acetic acids



## U.S. EPA Region 9, Drinking Water Division

## Drinking Water Standards and Health Advisories

ORGANIC Chemicals	Standard	EPA		IRIS		Health Advisories			Wt. of Evid.	California*		Arizona*	Hawaii*
		MCL	MCLG	RfD	ug/kg-d	10 <sup>-6</sup> Risk	Acute 10 day	Chronic (lifetime)		Non-Cancer	Cancer	MCL	MCL
		500	500	200			20,000	500		D	500	500	500
Picloram	Current	0.5	0		0.01				0.01	B2	0.5		0.5
Polychlorinated Biphenyls (PCBs)	Current	0.2	0							B2	0.2	0.004	0.2
Polynuclear Aromatic Hydrocarbons (PAHs) (Benzo(a)pyrene)	Current			15			200	100		D			
Prometon				75			800	50		C			
Pronamide				13			500	90		D			
Propachlor				20			1,000	10		C			
Propazine				20			5,000	100		D			
Propham				3	0.3		100	2	0.3	C			
RDX				5			500	4			4	4	4
Simazine	Current	4	4							C	100		100
Styrene	Current Proposed Secondary	100 10	100	200			2,000	100					
Tebuturon				70			3,000	500		D			
Terbacil				13			300	90		E			
Terbufos				0.13			5	0.9		D			
Terrachlor (Pentachloronitrobenzene)				3	0.1					C			
1,1,1,2-Tetrachloroethane				30	1		2,000	70	1	C			

Values are indicated in micrograms per liter (ug/l) [equivalent to parts per billion (ppb)] unless otherwise stated

Oral Referenced Doses (RfD) are in micrograms per kilogram per day (ug/kg-d), 10<sup>-6</sup> lifetime risk levels are in micrograms per liter.

\*- EPA MCLs apply unless noted as different



## U.S. EPA Region 9, Drinking Water Division

## Drinking Water Standards and Health Advisories

ORGANIC	Chemicals	Drinking Water Standards and Health Advisories												
		EPA		IRIS		Health Advisories				Wt. of Evid.	California*		Arizona*	Hawaii*
		Standard	MCL	MCLG	RfD	10 <sup>-6</sup> Risk	Acute 10 day	Chronic (lifetime)	Non-Cancer		MCL	PHG	MCL	MCL
Methyl Isobutyl Ketone (MIBK)														
Methyl Parathion				0.25			300	2		D				
Methyl t-Butyl Ether (MTBE)				30			24,000	200		C	13 5 (2ndary)	13		
Metolachlor				100			2,000	100		C				
Metribuzin				13			5,000	200		D				
Mirex				0.2	0.02					B2				
Molinate				2							20			
Naphthalene				20			500	100		C				
Nitroguanidine				100			10,000	700		D				
p-Nitrophenol				8			800	60		D				
Oxamyl (Vydate)	Current	200	200	25			200	200		E	200		200	200
Paraquat				4.5			100	30		C				
Parathion (Ethyl Parathion)				6						C				
Pentachloronitrobenzene (Terrachlor)				3	0.1					C				
Pentachlorophenol	Current	1	0	30	0.3	300			0.3	B2	1	0.4	1	1
Phenol				600			6,000	4,000		D				
Phthalates (Di(ethylhexyl)-phthalate)	Current	6	0	20	3				3	B2	4	12	6	6

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## U.S. EPA Region 9, Drinking Water Division

## Drinking Water Standards and Health Advisories

ORGANIC		Chemicals	Standard	EPA		IRIS		Health Advisories			Wt. of Evid.	California*		Arizona*	Hawaii*		
				RfD	ug/kg-d	10 <sup>-6</sup> Risk		Acute	Chronic (lifetime)			10 day	Non-Cancer	Cancer			
				MCL	MCLG												
Hexachlorobutadiene				2				300	1		C						
Hexachlorocyclopentadiene (HEX)	Current Proposed Secondary	50	8	50	7						D	50	50	50	50		
n-Hexane								4,000			D						
Hexazinone					50			2,000	400		D						
HMX						50		5,000	400		D						
Isophorone					200			15,000	100	40	C						
Isopropyl benzene (cumene)					100			11,000			D						
Isopropyl N-(3-chlorophenyl) carbamate (CIPC)																	
Isopropyl methylphosphonate					100			30,000	700		D						
Lindane	Current	0.2	0.2	0.3				1,000	0.2		C	0.2	0.032	0.2	0.2		
Linuron					2						C						
Malathion					20			200	100		D						
Maleic Hydrazide					500			10,000	4,000		D						
MCPA					1.5			100	4		D						
Methomyl (Lannate)					25			300	200		D						
Methoxychlor	Current	40	40	5				50	40		D	40	30	40	40		
Methylene Chloride (Dichloromethane)	Current	5	0	60	5	2,000				5	B2	5	4	5	5		
Methyl Ethyl Ketone (MEK, 2-Butanone)					600			7500			D						

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## U.S. EPA Region 9, Drinking Water Division

## Drinking Water Standards and Health Advisories

ORGANIC Chemicals	Standard	EPA		IRIS		Health Advisories			Wt. of Evid.	California*		Arizona*	Hawaii*
		MCL	MCLG	RfD	10 <sup>-6</sup> Risk	Acute 10 day	Chronic (lifetime)	Non-Cancer		MCL	PHG	MCL	MCL
				0.5									
Ethion													
Ethylbenzene	Current Proposed Secondary	700 30	700	100		3,000	700		D	700	300	700	700
Ethylene Dibromide (Dibromoethane) (EDB)	Current	0.05	0		0.0005	8		0.0005	B2	0.05	0.01	0.05	0.04
Ethylene Glycol				2,000		6,000	14,000		D				
Ethylene Thiourea (ETU)				0.08	0.2	300		0.2	B2				
Fenamiphos				0.25		9	2		D				
Fluometuron				13		2,000	90		D				
Fluorotrichloro- methane				300		7,000	2,000		D				
Folpet				100					B2				
Fonofos				2		20	10		D				
Formaldehyde				150		5,000	1,000		B1				
Glyphosate	Current	700	700	2		20,000	700		D	700	1000	700	700
Haloacetic Acids (5) (HAA5)	Current	60											
Heptachlor	Current	0.4	0	0.5	.008	10		0.008	B2	0.01	0.008	0.4	0.4
Heptachlor Epoxide	Current	0.2	0	0.013	.004			0.004	B2	0.01	0.006	0.2	0.2
Hexachlorobenzene (Perchlorbenzene) (HCB)	Current	1	0	0.8	0.02	50		0.02	B2	1	30	1	1

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\*- EPA MCLs apply unless noted as different

HAA5- Haloacetic acids. MCL is sum of mono-, di- and tri-chloro-acetic acids, and mono- and di-bromo-acetic acids



## U.S. EPA Region 9, Drinking Water Division

## Drinking Water Standards and Health Advisories

ORGANIC Chemicals	Standard	EPA		IRIS		Health Advisories			Wt. of Evid.	California*		Arizona*	Hawaii*	
		MCL	MCLG	RfD	10 <sup>-6</sup> Risk	Acute 10 day	Chronic (lifetime)			MCL	PHG	MCL	MCL	
				ug/kg-d	ug/kg-d	Non-Cancer	Cancer							
Dimethyl methyl-phosphonate				200	7	2000	100	7	C					
2,4-Dimethylphenol				200										
1,3-Dinitrobenzene				0.1		40	1		D					
2,4-Dinitrotoluene				2	0.05	500		0.05	B2					
2,6-Dinitrotoluene				1.0	0.05	400		0.05	B2					
Dinoseb	Current	7	7	1		300	7		D	7	14	7	7	
1,4-Dioxane) (p-Dioxane)					7	400		7	B2					
Dioxin (2,3,7,8-TCDD)	Current	3E-5	0	1 E-6	2 E-7	1 E-4		2 E-7	B2	3 E-5		3 E-5	3 E-5	
Diphenamid(e)				30		300	200		D					
Diphenylamine				30		1,000	200		D					
Di(ethylhexyl)-phthalate (PAE) (Phthalates)	Current	6	0	20	3			3	B2	4	14	6	6	
Diquat	Current	20	20	2			20		D	20	15	20	20	
Disulfoton				0.04		10	0.3		E					
1,4-Dithiane				10		400	80		D					
Diuron				2		1,000	10		D					
Endothall	Current	100	100	20		800	100		D	100	580	100	100	
Endrin	Current	2	2	0.3		5	2		D	2	1.8	2	2	
Epichlorohydrin	Current	TT	0	2	4	100		4	B2	TT		TT	TT	

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Oral Referenced Doses (RfD) are in micrograms per kilogram per day (ug/kg-d), 10<sup>-6</sup> lifetime risk levels are in micrograms per liter.

\*- EPA MCLs apply unless noted as different

PAE- Phthalate acid esters. MCL is sum of PAEs

TT- Treatment technique in lieu of numeric MCL



## U.S. EPA Region 9, Drinking Water Division

## Drinking Water Standards and Health Advisories

ORGANIC Chemicals	Standard	EPA		IRIS		Acute 10 day	Health Advisories		Wt. of Evid.	California*		Arizona*	Hawaii*
		MCL	MCLG	RfD $\mu\text{g/kg-d}$	$10^{-6}$ Risk		Chronic (lifetime)	Non-Cancer		MCL	PHG		
												MCL	MCL
Dichlorodifluoromethane (Freon 12)				200		40,000	1,000		D				
1,1-Dichloroethane										5	3		
1,2-Dichlorethane	Current	5	0		0.4	700		0.4	B2	0.5	0.4	5	5
1,1-Dichlorethylene	Current	7	7	9		1,000	7		C	6	10	7	7
cis-1,2-Dichloroethylene	Current	70	70	10		3,000	70		D	6		70	70
trans-1,2-Dichloro- ethylene	Current	100	100	20		1,000	100		D	10	4	100	100
Dichloromethane (Methylene chloride)	Current	5	0	60		2,000		5	B2	5		5	5
2,4-Dichlorophenol				3		30	20		E				
2,4-Dichlorophenoxy- acetic acid (2,4-D)	Current	70	70	10		300	70		D	70	70	70	70
1,2-Dichloropropane	Current	5	0		0.5	90		0.6	B2	5	0.5	5	5
1,3-Dichloropropene				30	0.4	30		0.4	B2	0.5	0.2		
Dieldrin				0.05	0.002	0.5		0.002	B2				
Diethylphthalate (PAE)				800			5000		D				
Diisopropyl methyl- phosphonate				80		8,000	600		D				
Dimethoate				0.2									
Dimethrin				300		10,000	2,000		D				
Dimethylaniline				20	0.05				C				

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PAE- Phthalate acid esters. MCL is sum of PAEs



## U.S. EPA Region 9, Drinking Water Division

## Drinking Water Standards and Health Advisories

ORGANIC Chemicals	Standard	EPA		IRIS		Acute	Health Advisories		Wt. of Evid.	California*		Arizona*	Hawaii*	
		MCL	MCLG	RfD	ug/kg-d		10 day	Non-Cancer	Cancer	MCL	PHG			
		ug/l	ug/l	ug/kg-d	10 <sup>-6</sup>	Risk				Evid.	ug/l	ug/l	ug/l	ug/l
Di(ethylhexyl)-adipate (Adipates)	Current	400	400	600	30	30	20,000	400	30	C	400	600	400	400
Diazinon				0.09			20	0.6		E				
Dibromoacetonitrile				20			2000	20		C				
Dibromochloromethane (Chlorodibromomethane, TTHM)	Current	80	60	20	40	40	6,000	60	40	C				
1,2-Dibromo-3-chloro propane (DBCP)	Current	0.2	0		0.03	50			0.03	B2	0.2	0.0017	0.2	0.04
Dibutyl phthalate (PAE)				100						D				
Dicamba				30			300	200		D				
Dichloroacetic acid (HAA5)	Current	60	0	4			1000			B2				
Dichloroacetonitrile				8			1,000	6		C				
1,2-Dichlorobenzene (o-Dichlorobenzene)	Current Proposed Secondary	600 100	600	90			9,000	600		D	600	600	600	600
1,3-Dichlorobenzene (m-Dichlorobenzene)				90			9,000	600		D				
1,4-Dichlorobenzene (p-Dichlorobenzene)	Current Proposed Secondary	75 5	75	100			10,000	75		C	5	6	75	75

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HAA5- Haloacetic acids. MCL is sum of mono-, di- and tri-chloro-acetic acids, and mono- and di-bromo-acetic acids

T&O- Taste and odor threshold

PAE- Phthalate acid esters. MCL is sum of PAEs



U.S. EPA Region 9, Drinking Water Division

**Drinking Water Standards and Health Advisories**

ORGANIC Chemicals	Drinking Water Standards and Health Advisories												
	Standard	EPA		IRIS		Acute 10 day	Health Advisories		Wt. of Evid.	California*	Arizona*	Hawaii*	
		MCL	MCLG	RfD ug/kg-d	$10^{-6}$ Risk		Non-Cancer	Cancer					
Chloroform (Trichlormethane, TTHM)	Current	80		10	6	4,000		6.0	B2	100		100	100
bis-2-Chloroisopropyl ether				40		4,000	300		D				
Chloromethane				4		400	3		C				
2-Chlorophenol				5		50	40		D				
Chloropicrin													
Chlorothalonil				15	1.5	200		1.5	B2				
Chlorotoluene (o,p)				20		2,000	100		D				
Chlorpyrifos				3		30	20		D				
CIPC (Chlorpropham) (isopropyl-N-(3-chlorophenyl) carbamate)				200									
Cresol (o,m)				500					C				
Cresol (p)				5					C				
Cyanazine				2		100	1		C				
Cyanogen chloride				50		50			D				
Dalapon	Current	200	200	26		3,000	200		D	200	790	200	200
DCPA (Dachthal)				10		80,000	700		D				
DDT				0.5	0.1				B2				

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T&O- Taste and odor threshold

TTHM- Total Trihalomethanes. MCL is sum of bromoform, chloroform, bromodichloromethane, and dibromochloromethane



## U.S. EPA Region 9, Drinking Water Division

## Drinking Water Standards and Health Advisories

ORGANIC Chemicals	Standard	EPA		IRIS		Acute	Health Advisories		Wt. of Evid.	California*		Arizona*	Hawaii*	
		MCL	MCLG	RfD $\mu\text{g/kg-d}$	$10^{-6}$ Risk		10 day	Chronic (lifetime)		Non-Cancer	Cancer			
										Evid.	MCL	PHG	MCL	MCL
Bromomethane (Methyl Bromide)				1		100	10		D				2.5	
Butylbenzene														
Butyl benzylphthalate (PAE)				200					C					
Butylate				50		2,000	350		D					
Captafol				2	4				C					
Captan				130					B2					
Carbaryl (Sevin)				100		1,000	700		D					
Carbofuran	Current	40	40	5		50	40		E	18	1.7	36	40	
Carbon Disulfide				100									830	
Carbon Tetrachloride	Current	5	0	0.7	0.3	200		0.3	B2	0.5	0.1	5	5	
Carboxin				100		1,000	700		D					
Chloral Hydrate (Trichloroacetaldehyde)				100		1,400	60		C					
Chloramden				15		3,000	100		D					
Chlordane	Current	2	0	0.5	0.01	60		0.01	B2	0.1	0.03	2	2	
Chlorobenzene (Monochlorobenzene)	Current	100	100	20		4,000	100		D	70		100	100	
Chlorodibromomethane (Dibromochloromethane, TTHM)	Current	80	60	20	6,000	60			C	100		100	100	

Values are indicated in micrograms per liter ( $\mu\text{g/l}$ ) [equivalent to parts per billion (ppb)] unless otherwise stated

Oral Referenced Doses (RfD) are in micrograms per kilogram per day ( $\mu\text{g/kg-d}$ ),  $10^{-6}$  lifetime risk levels are in micrograms per liter.

\*- EPA MCLs apply unless noted as different

PAE- Phthalate acid esters. MCL is sum of PAEs

TTHM- Total Trihalomethanes. MCL is sum of bromoform, chloroform, bromodichloromethane, and dibromochloromethane



## U.S. EPA Region 9, Drinking Water Division

## Drinking Water Standards and Health Advisories

ORGANIC Chemicals			IRS			Health Advisories			Wt. of Evid.	California*		Arizona*	Hawaii*
	Standard	EPA		RfD	ug/kg-d	10 <sup>-6</sup> Risk	Acute	Chronic (lifetime)		MCL	PHG	MCL	MCL
		MCL	MCLG				10 days	Non-Cancer	Cancer				
Anthrancene (PAH)				300					D				
Atrazine	Current	3	3	35			100	200		C	3	0.15	3
Baygon (Propoxur)				4			40	3		C			
Benefin				300									
Bentazon (Bassagran)				30			300	20		D	18	200	
Benz(a)anthracene (PAH)										B2			
Benzene	Current	5	0		1	200			1	A	1	0.15	5
Benzene Hexachloride (alpha, beta isomers)													
Benzo(a)pyrene (PAH)	Current	0.2	0						0.02	B2	0.2	0.004	0.2
Benzo(b)fluoranthene (PAH)										B2			
Bolero (Thiobencarb)				20							70	1 SMCL	
Bromacil				130			5,000	90		C			
Bromobenzene							4,000			D			
Bromochloromethane				13			1,000	90		D			
Bromodichloromethane (TTHM)	Current	80	0	20	0.6	6,000			0.6	B2	100		100
Bromoform (TTHM)	Current	80	0	20	4	2,000			4	B2	100		100

Values are indicated in micrograms per liter (ug/l) [equivalent to parts per billion (ppb)] unless otherwise stated

Oral Referenced Doses (RfD) are in micrograms per kilogram per day (ug/kg-d), 10<sup>-6</sup> lifetime risk levels are in micrograms per liter.

\*- EPA MCLs apply unless noted as different

LOQ- Level of quantitation

PAH- Polyaromatic hydrocarbons

TTHM- Total Trihalomethanes. MCL is sum of bromoform, chloroform, bromodichloromethane, and dibromochloromethane

(b)- 100 ug/L TTHM MCL remains effective until 12/17/01 for systems serving >10,000 people, then 80 ug/L MCL is effective. Effective date 12/17/03 for all other systems



## U.S. EPA Region 9, Drinking Water Division

## Drinking Water Standards and Health Advisories

ORGANIC						Health Advisories			Wt. of Evid.	California*		Arizona*	Hawaii*	
Chemicals	Standard	EPA		IRS	RfD	10 <sup>-6</sup> Risk	Acute 10 days	Chronic (lifetime)			MCL	PHG	MCL	MCL
		MCL	MCLG	ug/kg-d	10 <sup>-6</sup> Risk			Non-Cancer	Cancer					
Acenaphthylene (Acenaphthene)				60										
Acephate				4						C				
Acetone				100						D				
Acetophone				100										
Acifluorfen				13	1	2,000			1	B2				
Acrolein										C		320		
Acrylamide	Current	TT	0	0.2	0.01	300			0.01	B2	TT		TT	TT
Acrylonitrile					0.06				0.06	B1		10		
Adipates (diethylhexyl)adipate)	Current	400	400	600	30	20,000	400	30	C	400		400	400	
Alachlor	Current	2	0	10	0.4	100			0.4	B2	2	4	2	2
Aldicarb	Final (a)	3	1	1.0		10	7			D				
Aldicarb Sulfone	Final (a)	2	1	1.0		10	7			D				
Aldicarb Sulfoxide	Final (a)	4	1	1.0		10	7			D				
Aldrin				0.03	0.002	0.3			0.002	B2				
Allyl alcohol				5										
Ametryn				9		9,000	60			D				
Ammonium Sulfamate				200		20,000	2,000			D				

Values are indicated in micrograms per liter (ug/l) [equivalent to parts per billion (ppb)] unless otherwise stated

Oral Referenced Doses (RfD) are in micrograms per kilogram per day (ug/kg-d), 10<sup>-6</sup> lifetime risk levels are in micrograms per liter.

(a) - Effective date postponed

\*- EPA MCLs apply unless noted as different

TT- Treatment technique in lieu of numeric MCL



## U.S. EPA Region 9, Drinking Water Division

## Drinking Water Standards and Health Advisories

INORGANIC		Chemical	Standard	EPA		IRIS		Acute 10 day	Health Advisories		Wt. of Evid.	California**		Arizona**	Hawaii**
MCL	MCLG			RfD	μg/kg-d	10 <sup>-6</sup> Risk	Chronic (lifetime)		Non-Cancer	Cancer		MCL	PHG		
Aluminum	Secondary	50-200										1000 200 SMCL	600		
Ammonia							30,000			D					
Antimony	Current	6	6	0.4		15	3			D	6		20	6	6
Arsenic	Current Final (a)	50 10	n/a 0	0.3	0.02				0.02	A	50			50	50
Asbestos	Current	7E+6 10um fibers	7E+6 10um fibers							A	7E+6 10um fibers				
Barium	Current	2,000	2,000	70			2,000			D	1,000		700	2,000	2,000
Beryllium	Current	4	4	5	0.008	30,000			0.008	B2	4		1	4	4
Boron				90		900	600			D					
Bromate	Current	10	0		0.05					B2					
Cadmium	Current	5	5	0.5		40	5			D	5		0.07	5	5
Chloramines	Current	MRDL* 4.0mg/L as Cl	MRDLG* 4.0mg/L as Cl	100		1000	3000-4000			D					
Chlorate										D			200		
Chloride	Secondary	250mg/L									250-600 Secondary				
Chlorine	Current	MRDL* 4.0mg/L as Cl	MRDLG* 4.0mg/L as Cl	100						D					

Values are indicated in micrograms per liter (μg/l) [equivalent to parts per billion (ppb)] unless otherwise stated

Oral Referenced Doses (RfD) are in micrograms per kilogram per day (μg/kg-d), 10<sup>-6</sup> lifetime risk levels are in micrograms per liter.

\*\*- EPA MCLs apply unless noted as different

\* - MRDL, MRDLG: Maximum residual disinfectant level and goal. Apply only if this disinfectant is used.

(a)- effective 1/23/06



# U.S. EPA Region 9, Drinking Water Division

## Drinking Water Standards and Health Advisories

INORGANIC		Chemicals	Standard	EPA		IRIS		Health Advisories			Wt. of Evid.	California**		Arizona**	Hawaii**		
				MCL	MCLG	RfD	10 <sup>-6</sup> Risk	Acute	Chronic (lifetime)	Non-Cancer		MCL	PHG				
								10 days									
Chlorine Dioxide	Current	MRDL* 0.8mg/L as ClO <sub>2</sub>	MRDLG* 0.8mg/L as ClO <sub>2</sub>	10				300			D						
Chlorite	Current	1.0mg/L	800	3				80			D						
Chromium (total)	Current	100	100	3			1,000.00	100			D	50		100	100		
Copper	Current	AL 1300 TT ## 1,000	1,300								D	TT ## 1000 SMCL	170	TT##	TT##		
Cyanide	Current	200	200	22			200	200			D	200	150	200	200		
Fluoride	Current Proposed Secondary	4 mg/L 2mg/L	4 mg/L	120								1400-2400 td	1000	4 mg/L	4 mg/L		
Iron	Secondary	300										300					
Lead	Current	AL 15 TT#	0								B2	TT #	2	TT#	TT#		
Manganese	Secondary	50		140 (food) 5(water)								50					
Mercury (inorganic)	Current	2	2	0.3				2			D	2	1.2	2	2		
Molybdenum				5			40	40			D						
Nickel				20			1,000	100			D	100	12				
Nitrate (as N)	Current	10mg/L	10mg/L	1.6mg/L			10mg/L***				D	45 mg/L (as NO <sub>3</sub> )		10 mg/L	10 mg/L		

Value are indicated in micrograms per liter ( $\mu\text{g/L}$ ) [equivalent to parts per billion (ppb)] unless otherwise stated

Oral Reference Doses (RfD) are in micrograms per kilogram per day ( $\mu\text{g/kg-d}$ ),  $10^{-6}$  lifetime risk levels are in micrograms per liter.

\*\* - EPA MCLs apply unless noted as different

\* - MRDL, MRDLG: Maximum residual disinfectant level and goal. Apply only if this disinfectant is used.

\*\*\* - 10 day NA for nitrate/nitrite for 4kg child (protective of 10kg child & adults); also used for chronic (lifetime)

td- temperature dependent value

TT # - Treatment technique and public notification triggered at Action Level of 15 ppb

TT ## - Treatment technique triggered at Action Level of 1300 ppb



## Drinking Water Standards and Health Advisories

INORGANIC		Chemicals	Standard	EPA		IRIS		Health Advisories			Wt. of Evid.	California**		Arizona**	Hawaii**		
				MCL	MCLG	RfD	ug/kg-d	10 <sup>-6</sup> Risk	Acute	Chronic (lifetime)		MCL	PHG				
									10 days	Non-Cancer	Cancer						
Nitrite (as N)	Current	1mg/L	1mg/L	160			1mg/L***				D	1mg/L		1 mg/L	1 mg/L		
Perchlorate									4-18 Provisional				6				
Selenium	Current	50	50	5								50		50	50		
Silver	Secondary	100		5		200		100			D	100 Secondary		50	50		
Strontium				600		25 mg/L		17 mg/L			D						
Sulfate	Secondary	250 mg/L										250-600 Secondary					
Thallium	Current	2	0.5	0.07		7		0.4				2	0.1	2	2		
Vanadium				7							D						
White Phosphorous				0.02				0.1			D						
Zinc	Secondary	5mg/L		300		6mg/L		2mg/L			D	5mg/L Secondary					

Values are indicated in micrograms per liter (ug/L) [equivalent to parts per billion (ppb)] unless otherwise stated.

Oral Reference Doses (RfD) are in micrograms per kilogram per day (ug/kg-d), 10<sup>-6</sup> lifetime risk levels are in micrograms per liter.

\*\* - EPA MCLs apply unless noted as different

\*\*\* - 10 day NA for nitrate/nitrite for 4kg child (protective of 10kg child & adults); also used for chronic (lifetime)



## Drinking Water Standards and Health Advisories

RADIONUCLIDES		Chemicals	EPA		IRIS		Acute	Health Advisories		Wt. of Evid.	California	PHG	Arizona	Hawaii
Standard	MCL		MCLG	RfD	$\mu\text{g/kg-d}$	$10^{-6}$ Risk		Chronic (lifetime)	Non-Canc					
									Cancer					
Gross alpha (excluding uranium & radon)	Current	15 pCi/L	0						0.15 pCi/L	A	15 pCi/L		15 pCi/L	15 pCi/L
Gross beta and photon emitters	Current	4 mrem/yr	0						0.04 mrem/yr	A	50pCi/L		4 mrem/yr	4 mrem/yr
Radium 226	Current	5 pCi/L (+Ra228)	0						0.20 pCi/L	A	5 pCi/L (+Ra228)		5 pCi/L (+Ra228)	5 pCi/L (+Ra228)
Radium 228	Current	5 pCi/L (+Ra226)	0						0.20 pCi/L	A	5 pCi/L (+Ra226)		5 pCi/L (+Ra226)	5 pCi/L (+Ra226)
Radon	Proposed	300 pCi/L AMCL* 4000pCi/L	0						1.5 pCi/L	A				
Strontium 90										A	8 pCi/L			
Tritium										A	20 nCi/L			
Uranium	Current	30 ug/L	0	3					0.7 ug/L	A	20 pCi/L	0.43 pCi/L		

Values are indicated in micro grams per liter ( $\mu\text{g/L}$ ) [equivalent to parts per billion (ppb)] unless otherwise stated

Oral Reference Doses (RfD) are in micrograms per kilogram per day ( $\mu\text{g/kg-d}$ ),  $10^{-6}$  risk levels are in micrograms per liter.

\* Alternative MCL of 4000 pCi/L applies if radon multimedia mitigation program in place